

# Multi-User ECP Automated Review System

By John Rogers

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*"Our office saved \$250,000 in paper costs in the first year of using MEARS."*

*- William F. Moeller  
Patriot Missile Configuration Manager*

*"MEARS has reduced our ECP creation and review process from 75 days to 10 days."*

*- Angela D. Smith  
U.S. Marine Corps AAV Program Office*

The Multi-User Engineering Change Proposal (ECP) Automated Review System (MEARS) provides an automated engineering change process that could save your Navy program or agency time, money and effort.

Just imagine the possibility of beginning and completing a Configuration Control Board (CCB) in as little as one day. Without travel and other related ECP costs, your CCB members and subreviewers around the globe could log in to MEARS on the Web for electronic creation of ECPs, Request for Waivers/Request for Deviations (RFW/RFD), Specification Change Notifications (SCN) and Notice of Revisions (NOR), as well as online review, redlining, comment and disposition — and all in real-time.

MEARS is a government-developed and owned, Web-based software program that automates the engineering change process. A truly remarkable configuration management tool, MEARS expedites ECPs from creation to archives. MEARS, recently named a Best Manufacturing Practices Center of Excellence (BMPCOE) site by the Office of Naval Research Best Manufacturing Practices (BMP) Program (<http://www.bmpcoe.org>), is managed by the MEARS Program Office at the U.S. Army Aviation and Missile Command (USAMCOM) at Redstone Arsenal, Ala.

BMPCOE is a business process improvement think tank sponsored by the Naval

Operations Research Center, University of Maryland and the U.S. Department of Commerce. Originally deployed in 1992 to the Patriot Project Office, MEARS has been named a Department of Defense best of breed solution, and today supports 3,500 DoD, Department of Homeland Security (DHS), defense industry and foreign military sales customers throughout the world.

Defense and DHS MEARS customers include the program offices for the Patriot missile; Armed Reconnaissance helicopter; Multiple Launch Rocket System; Hellfire missile; Apache Longbow; Avenger; Test, Measurement and Diagnostic Equipment; Automated Test Equipment/Test Program Sets; CH-47 Chinook helicopter; Missile Defense Agency; Defense Contract Management Agency; U.S. Marine Corps; Naval Surface Warfare Center; Hercules; Bradley Fighting Vehicle; U.S. Coast Guard; and elements of the Department of Homeland Security.

MEARS handles unclassified documents and drawings, as well as those that are classified through the SIPRNET. MEARS is NMCI-certified (Navy Marine Corps Intranet) and links to the Joint Engineering Data Management Information and Control System (JEDMICS) and Configuration Management Information System (CMIS). MEARS, through Database Mapper, can also port data to other relational databases to avoid manual data entry.

A staff of one government program manager, five contractor developers and four contractor customer support personnel provide world-class customer service from their office located at USAMCOM Integrated Materiel Management Center.

MEARS and its customers are like family. Without exaggeration, we would be nowhere without our customers, and we treat them that way. We continue to develop and mold MEARS to meet the unique requirements of each customer.

## MEARS Software

MEARS consists of five components: MEARS Create, MEARS Review, MEARS System Utilities, MEARS Database Mapper and the new MEARS Reports module, which includes a custom report feature. MEARS has the capability to populate ECP data into Structured Query Language (SQL) CM databases and can interoperate with tools using an Extensible Markup Language (XML) schema.

MEARS utilizes the Computer-Aided Acquisition and Logistics Support (CALs) compliant text interchange format, Standard Generalized Markup Language (SGML), Hypertext Markup Language (HTML), XML and CALs-compliant graphics. SGML enables automated relational database loading and also enables hypermedia review of engineering change documents.

All documents are viewed with the Secured Socket Layer (SSL) and maintained on a Web server. Any user with access to the Internet and a Java enabled browser will be able to access a MEARS Web server with a validated login and password.

MEARS has been in production since the Windows version of MEARS was released in 1993 and was replaced with the first Web version of MEARS, 7.0, in December 1998. There were nine improved versions released between December 1998 and May 2004.

The current version of MEARS (9.4a) was released Nov. 17, 2005. Enhancements include the Specification Change Notice form; the ability to attach documents (MS Word, Excel, etc.) to comments; automatic e-mail notification on document disposition; and a key word search capability for ECP number, item nonmenclature or any key word.

MEARS receives no direct DoD funding; it relies totally on reimbursable dollars from government customers.

For more information about MEARS, go to our Web site at <http://mears.army.mil> to view an online demonstration, or phone the MEARS support desk at (256) 842-0864 or DSN 788-0864.

*John Rogers is the MEARS program manager.* CHIPS